RECORD OF PLAN CONFORMANCE AND
CATEGORICAL EXCLUSION (CX) DETERMINATION
Bureau of Land Management (BLM)

Project Name: Wood River Wetland Well Maintenance and Decommissioning CX Log #: CX-08-08
Project Location: Wood River Wetland Lease or Serial #: N/A
BLM Office: Lakeview District, Klamath Falls Resource Area County: Klamath County, Oregon

A. Background

Description of Proposed Action:

The Wood River Wetland (WRW) is approximately 3,200 acres, and is located 25 miles north of Klamath Falls, Oregon. It is currently owned and managed by the Klamath Falls Resource Area of the Bureau of Land Management (BLM). Prior to the BLM acquisition in 1994, the property was in private ownership and was drained in the 1950's for cattle grazing. It operated mainly as a cow/calf operation with up to 1,300 pairs of cattle. During this period of private ownership, five artesian wells were developed on the property for livestock use. These were/are low flow wells which together discharge approximately 70 acre feet of water annually. The purpose of the proposed action is to decommission or valve these wells such that they cease to continually discharge water. All five wells will be accessed by truck, ATV or boat. The top of the pipe (casing) will be exposed and water will need to be pumped or piped away from the well area in order for the work to be done. The pipe (casing) will then be pumped, filled with bentonite and capped below ground level. The site will then be re-contoured and rehabilitated.

The decommissioning is expected to be implemented during the next 2 years and will be completed no later than the summer of 2010. Work would be accomplished using a variety of equipment as described below. Temporary canal crossings will be needed as described below and will be removed by the contractor. The project is supported by US Geological Survey and the Oregon Water resources Department, and several other water user groups. There is no known opposition to decommissioning the wells.

Artesian Well #1

WRW artesian well #1 is located near the corral on the east side of the WRW property. It is approximately 3.9 miles by gravel/native surface road from the main parking lot. The site is approximately .25 miles from the northeast corner of the property (see map). The well is approximately 208 feet deep and discharges an average of 5.5 gallons/minute from a 2 ½ inch surface pipe. The water head is measured at 6.1 to 7.1 feet above the land surface. The site may be accessed by vehicle via gravel/native surface roads within approximately 15 feet of the well. The following actions will likely need to be completed in order for valving to occur:

1. Dry up area adjacent to well pipe by attaching hose to well pipe and allowing well water to flow to nearby pond.
2. Excavate around well pipe to expose down to casing.
3. Pump water out of excavated area.
4. Build and attach flange coupling, valve and pressure gauge.
5. Re-contour and rehabilitate site.

Artesian Well #2

WRW artesian well #2 is located on an island of the Wood River Canal on the east side of the WRW property. It is approximately 2.0 miles by gravel/native surface road from the main parking lot. The site is approximately .15 miles west of Crooked Creek (see map). The well is approximately 149 feet deep and discharges an average of 2.6 gallons/minute. The water head is measured at 3.2 to 3.5 feet above the land surface. The site may be accessed by vehicle via gravel/native surface roads within approximately 17 feet of the well. There is a 12 foot wide canal between the road and well, therefore a temporary span or floating crossing will be needed to cross the canal and to access the well pipe. The following actions will likely need to be completed in order for valving to occur:

1. Install temporary crossing across canal.
2. Dry up area adjacent to well pipe by attaching hose to well pipe and allowing well water to flow to nearby canal.
3. Excavate around well pipe to expose down to casing.
4. Pump water out of excavated area.
5. Build and attach flange coupling, valve and pressure gauge.
6. Re-contour and rehabilitate site,
7. Remove temporary crossing.

Artesian Well #3

WRW artesian well #3 is located within the north half of the WRW property. The access point is approximately 2.9 miles by gravel/native surface road from the main parking lot. The site is approximately .36 miles into the wetland, west of the road (see map). The well is approximately 219 feet deep and discharges an average of 5.8 gallons/minute. The water head is measured at 8.0 to 10.2 feet above the land surface. The site may be accessed by vehicle via gravel/native surface roads within approximately .36 miles of the well. There is a small (4 foot wide) canal between the road and the wetland, therefore a temporary span or floating crossing will be needed to access the wetland. Temporary land mats should be used in order to gain equipment access to the well site. There is a 15 foot wide canal near the well pipe. A temporary span or floating crossing will be needed to cross the canal and to access the well pipe. Land mats will also be needed to access the well pipe from the edge of the canal crossing. The following actions will likely need to be completed in order for decommissioning to occur:

1. Install temporary crossings across canals.
2. Use land mats to access site.
3. Dry up area adjacent to well pipe by attaching hose to well pipe and allowing well water to flow to nearby canal.
4. Excavate around well pipe to expose down to casing.
5. Construct coffer dam to isolate well site from adjacent wetland.
6. Pump water out of coffer dam area.
7. Pump well pipe to reduce artesian flow.
8. Fill pipe/casing with bentonite.
9. Cap with concrete pad below ground surface.
10. Re-contour and rehabilitate site,
11. Remove temporary crossings.

Artesian Well #4

WRW artesian well #4 is located within the north half of the WRW property. The access point is approximately 4.8 miles by gravel/native surface road from the main parking lot. The site is approximately .26 miles into the wetland, south of the road (see map). The depth of the well in unknown and it discharges an average of 20.2 gallons/minute from a 2 inch surface pipe. The water head is measured at 15.4 feet above the land surface. The site may be accessed by vehicle via gravel/native surface roads within approximately .26 miles of the well. The levee road is raised above the wetland surface; therefore, a temporary ramp will be needed to access the wetland. Temporary land mats may be needed in order to gain equipment access to the well site. The following actions will likely need to be completed in order for decommissioning to occur:

1. Dry up area adjacent to well pipe by attaching hose to well pipe and allowing well water to flow to nearby canal.
2. Excavate around well pipe to expose down to casing.
3. Construct coffer dam to isolate well site from adjacent wetland.
4. Pump water out of coffer dam area.
5. Pump well pipe to reduce artesian flow.
6. Fill pipe/casing with bentonite.
7. Cap with concrete pad below ground surface.
8. Re-contour and rehabilitate site.

Artesian Well #5

WRW artesian well #5 is located within the south half of the WRW property. The access point is approximately 3.8 miles by gravel/native surface road from the main parking lot. The site is approximately .21 miles into the wetland, south of the road (see map). The well is approximately 192 feet deep and discharges an average of 8.9 gallons/minute. The water head is measured at 9.9 feet above the land surface. The site may be accessed by vehicle via gravel/native surface roads within approximately .21 miles of the well. There is a 15 foot wide canal between the road and the wetland, so a temporary span or floating crossing will be needed to cross the canal and to access the well pipe. Temporary land mats should be used in order to gain equipment access to the well site. The following actions will likely need to be completed in order for decommissioning to occur:

1. Install temporary crossings across canals.
2. Use land mats to access site.
3. Dry up area adjacent to well pipe by attaching hose to well pipe and allowing well water to flow to nearby canal.
4. Excavate around well pipe to expose down to casing.
5. Construct coffer dam to isolate well site from adjacent wetland.
6. Pump water out of coffer dam area.
7. Pump well pipe to reduce artesian flow.
8. Fill pipe/casing with bentonite.
9. Cap with concrete pad below ground surface.
10. Re-contour and rehabilitate site.
11. Remove temporary crossings.

Purpose and Need for the Project:

The wells discharge water with high concentrations of nitrogen and phosphorus. The wells are between 140 and 200 feet deep, so it is likely that the high levels are not a consequence of surface land management activities. Due to casing depth, it is possible that the wells are intercepting high nutrient loads from an ash layer deposited from the Mount Mazama eruption which occurred approximately 7,000 years ago. High concentrations of ammonia were also recorded during the USGS study. Although these are low flow wells (~70 ac ft/yr accounting for 1% to 2% of the total water budget for WRW), they are contributing approximately 10% of the nutrient loading to the 3,000 acre wetland. The BLM is required to decommission artesian wells if they are not being used to comply with beneficial use standards under Oregon state law.

Proposed Implementation:

Funding is currently available and the contract for this project shall be awarded in FY2008, however the contractor shall be allowed to complete the well decommissioning during FY2008 and FY2009.

B. Land Use Plan Conformance

Land Use Plan Name, Date Approved:

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decision(s) (objectives, terms, and conditions):

- The Upper Klamath Basin and Wood River Wetland Record of Decision, February 1996, (Wood River ROD) states within the Water Resources Objective that the BLM shall "Improve water quality….of water entering Agency Lake from this property" and "The BLM will comply with all applicable Oregon State water laws…."

The proposed project has also been reviewed and found to be in conformance with one or more of the following BLM plans, programmatic environmental analyses or policies:

- Vegetation Treatment on BLM Lands in Thirteen Western States FEIS and ROD (1991)
- Northwest Area Noxious Weed Control Program FEIS and ROD (1985) and Supplement (1987)
- Integrated Weed Control Plan (IWCP) 1993

C. Compliance with NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 2, Appendix 1, #1.7 (Maintenance).

The proposed action is categorically excluded from further analysis or documentation under the National Environmental Policy Act (NEPA) provided none of the Extraordinary Circumstances listed in 516 Departmental Manual 2, Appendix 2 (5/27/04) are met. The proposed action will:

CX Extraordinary Circumstances Documentation		
The proposed categorical exclusion action will:	**YES**	**NO**
2.1 Have significant impacts on public health or safety.		X
Rationale: There should be no significant impacts on public health or safety.		
2.2 Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		X
Rationale: Although there is potential to affect wetlands and migratory birds, any effects would be short term and insignificant. The other resources are not present.		
2.3 Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA Section 102(2) (E)].		X
Rationale: No highly controversial effects or unresolved conflicts would occur.		
2.4 Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.		X
Rationale: The wells will be capped according to standard methodology. No unknown or uncertain risks are expected.		
2.5 Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.		X
Rationale: No precedent would be established.		
2.6 Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.		X
Rationale: There would be no cumulatively significant environmental effects.		
2.7 Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.		X
Rationale: No such properties would be affected.		
2.8 Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X
Rationale: There is a remote possibility that Oregon spotted frogs (a candidate species) could be affected by capping of Well #1. To avoid adverse impact, this well will be fitted with a valve to allow release of water if needed.		
2.9 Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.		X
Rationale: No laws would be violated by implementation of this action.		
2.10 Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).		X
Rationale: No disproportionate adverse effects would be expected.		
2.11 Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).		X
Rationale: There would be no effect on Indian sacred sites.		
2.12 Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).		X
Rationale: This project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species due to implementation of standard preventative measures.		

The proposed action would not meet any of the above extraordinary circumstances, or fail to comply with Executive Order 13212 (Actions to Expedite Energy-Related Projects) – to avoid direct or indirect adverse impact on energy development, production, supply, and/or distribution.

D. Surveys and Consultation
Surveys and/or consultation may be needed for special status plants and animals, for cultural resources, and other resources as necessary (appropriate fields are Initialed and Dated by responsible resource specialist):

Surveys	Are Completed	Will Be Completed	Are Not Needed
SS Animals	SGH 07/28/08		
SS Plants	MJB 07/29/08		
Cultural Resources			BMB 7/28/08
Consultation	Is Completed	Will Be Completed	Is Not Needed
SS Animal Consultation*			SGH 07/28/08
Botanical Consultation	MJB 07/29/08		
Cultural Consultation	BMB 7/28/08		
*(SS = Special Status)			

Remarks: Tribal Consultation occurred on June 23, 2008 with Perry Chocktoot, Culture and Heritage Director for The Klamath Tribes for this project - he had no concerns.

E. Decision

I have considered the design features and mitigations (Appendices A, B, and C) for this proposed project. The proposed action would not create adverse environmental impacts or require the preparation of an environmental assessment (EA) or environmental impact statement (EIS). The proposed action has been reviewed against the criteria for extraordinary circumstances (listed above) as identified in 516 DM 2, Appendix 2. The application of this categorical exclusion is appropriate, as there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action is, therefore, categorically excluded from additional NEPA documentation.

It is my decision to proceed with the Proposed Action.

F. Signature

Authorizing Official: /s/ *Donald J. Holmstrom* Date: 8/01/08
(Signature)
Name: Donald J. Holmstrom
Title: Manager, Klamath Falls Resource Area

G. Contact Person
For additional information concerning this CX review, contact:

Robert H. Roninger III, Fisheries Biologist, Klamath Falls Resource Area, 2795 Anderson Avenue, Building 25, Klamath Falls, Oregon 97603-7891 or telephone: 541-883-6916.

Appendix A – Weed Mitigation Measures

All vehicles and equipment will be cleaned off prior to operating on BLM lands. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required and may be accomplished with a pressure hose.

High concentrations of noxious weeds in the immediate area of mechanical operations shall be mowed to ground level prior to the start of project activities.

All equipment and vehicles operating off of main roads shall be cleaned off prior to leaving the job site when the job site includes noxious weed populations. Removal of all dirt, grease, and plant parts that may carry noxious weed seeds or vegetative parts is required and may be accomplished with a pressure hose.

Appendix B – Soils Quality PDFs and BMPs

Soil Quality PDFs and BMPs (BMPs are from KFRA RMP Page D-11)

- Limit detrimental soil conditions to less than 20 percent of the total acreage within the activity area. Use current soil quality indicators to monitor soil impacts. Sites where the 20 percent standard is exceeded will require treatment, such as ripping, backblading or seeding.
- Retain and establish adequate vegetative cover in accordance with RMP BMPs to reduce erosion.
- Retain enough small woody (dead and down) material to sustain soil nutrients. See RMP BMPs for specifications. In ponderosa pine forest land, nine tons per acre of duff and litter (approximately ½ inch deep).
- Seed and/or mulch exposed and disturbed soil surfaces with native seed when seed is available.

Appendix C – Water and Fish Mitigation

Project Design Features (PDFs) for Fuels Treatments within Riparian Reserves with No Listed Fish Species
The purpose of this document is to provide guidance to fuels management personnel for designing fuels projects that include treatments within Riparian Reserves. These PDFs should be used for units adjacent to or containing riparian areas and/or fish habitats. Objectives of fuels treatments within riparian reserves (RRs) are: protection of vegetation and soils from catastrophic fire, (including overhead canopy for stream shading); restoration of riparian areas to the potential natural community for the site; increased productive vigor vegetation within the riparian areas; and retention and protection of coarse woody debris (CWD) and overhead cover for stream function and aquatic habitats.

The following information is from the Klamath Falls Resource Area Resource Management Plan.

- Riparian Reserves are lands along streams and unstable and potentially unstable areas where special standards and guidelines direct land use."
- Riparian areas, for the purposes of these PDFs, are defined as lands adjacent to perennial and intermittent streams, springs, lakeshores, wetlands, and reservoirs. Riparian areas have vegetation and soils with physical characteristics showing permanent surface or subsurface water influence.
- Streams covered under these PDFs include perennial streams, (streams that generally flow year round) and intermittent streams (streams that generally run for at least 30 days per year, and have a definable channel and evidence of annual scour or deposition.)
- Wetlands are areas that are inundated by surface or ground water for a sufficient frequency and duration to support vegetation adapted to saturated soil conditions.
- There should be an opportunity on a case-by-case basis to assess the effect of the buffer width on riparian areas and aquatic species and habitats.

Stream crossings:

- Cross streams only at designated crossings. Select locations that are stable and naturally armored. If naturally armored sites for crossings are not present, temporarily stabilize crossings (i.e. logs, rock.)
- Cross stream at right angles.

- Minimize number and width of crossings.
- Locate crossings in areas with minimum relative slope. Crossings should not occur on slopes > 30%.
- Minimize number of passes.
- Rehabilitate (ruts, disturbed soils, etc.)
- Hand treatments would be recommended within the no-mechanical-entry zones to meet fuels management objectives.

Roads and temporary fire trail access in riparian reserves:

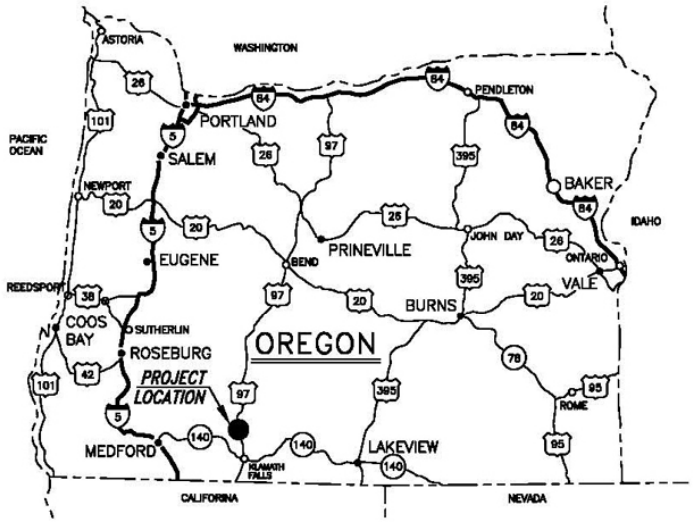
- No new roads will be constructed within the RR unless they replace an existing road that is causing more resource damage. If possible, use new technology construction methods for building temporary roads into treatment units (including but not limited to wood chip constructed roads.)
- Use of existing roads and landings within the RR will be reviewed and approved by the resource advisor.
- Minimal or no grading of the existing roads will be done to maintain the existing ground cover and vegetation and to decrease sediment movement.

Appendix D – Maps

General Location Map

Wood River Wetlands –

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LAKEVIEW DISTRICT

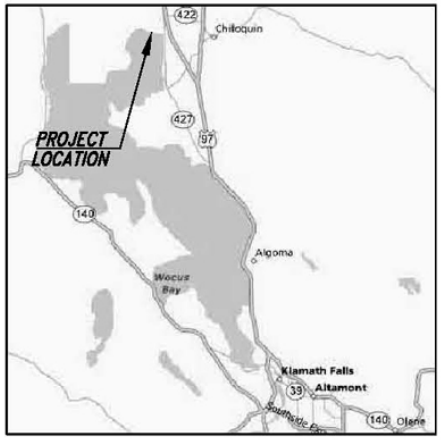


LOCATION MAP

NOT TO SCALE

GEOGRAPHIC LOCATION

TOWNSHIP 34 SOUTH, RANGE 7 1/2 EAST
WILLAMETTE MERIDIAN, KLAMATH COUNTY, OREGON



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ALWAYS THINK SAFETY

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LAKEVIEW DISTRICT — OREGON

Wood River Wetland, Artesian Wells

TITLE SHEET

ENGINEERING APPROVAL _____ CHIEF, BRANCH OF ENGINEERING OR DISTRICT ENGINEER
SUBMITTED _____ RESOURCE FIELD MANAGER
RECOMMENDED _____ AREA OPERATIONS
APPROVED _____ DISTRICT MANAGER

DRAWN: JRE	SCALE: NONE
DATE: 05/2008	SHEET 1 OF 8
DRAWING NO.	OR-010-2008-Woodriver1

Well Site Locations